



UNIVERSITY OF DALLAS

Facilities Department



EPA Awareness & What it means to us

To be used in conjunction with the handout, "EPA Awareness"

Introduction



We see the news reports almost every day regarding different occurrences within our environment. Our Facilities department is responsible for everything from the quality of the air we breathe, to the walking surfaces that are used on our campus.

The cleaning products that we used to clean the buildings, and the chemicals used to provide climate control inside the buildings all have regulations for use that are designed to be in compliance with the EPA. MSDS information details what chemicals are used and how they affect the environment and the people in it. Even the way we dispose of wastes has an impact on our environment.



What is the EPA?

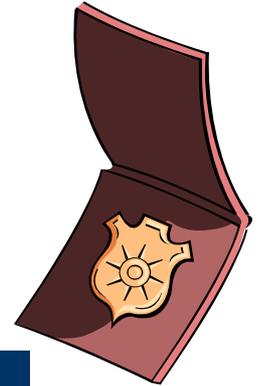


RICHARD M. NIXON

The 37th U.S. President
1969-1974

The **Environmental Protection Agency (EPA)** is an agency of the federal government that is charged with protecting human health and the environment, by writing and enforcing regulations based on laws passed by Congress. The EPA was proposed by President Richard Nixon and began operation on December 3, 1970. The agency has approximately 18,000 full-time employees.

Responsibilities of the EPA

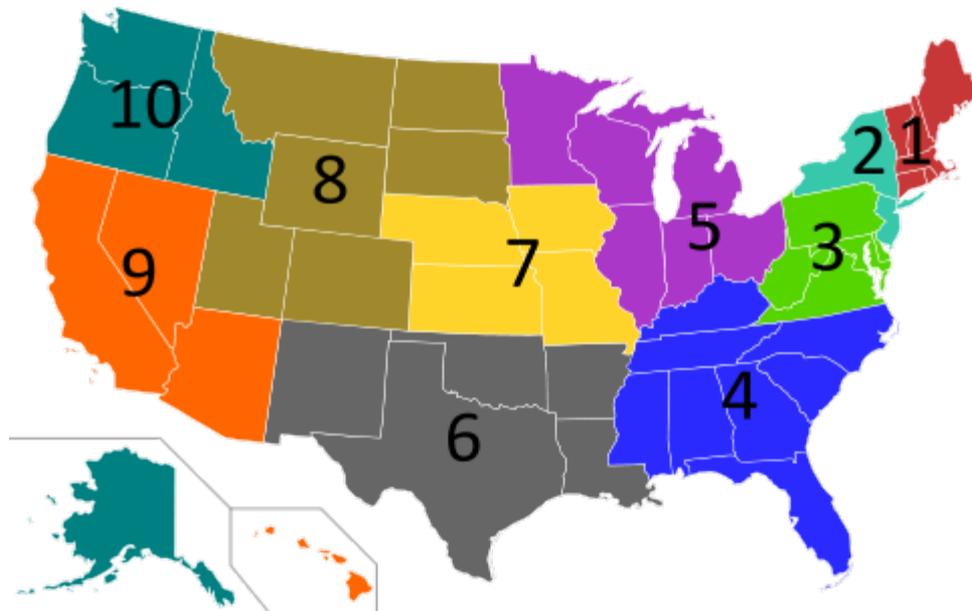


The EPA is responsible for:

- preventing and detecting environmental crimes
- informing the public of environmental enforcement
- setting and monitoring standards of air pollution, water pollution, hazardous wastes and chemicals

The administrative regions of the Environmental Protection Agency

We are in Region Six



Air Legislation



- 1955 - Air Pollution Control Act PL 84-159
- 1963 - Clean Air Act PL 88-206
- 1965 - Motor Vehicle Air Pollution Control Act PL 89-272
- 1966 - Clean Air Act Amendments PL 89-675
- 1967 - Air Quality Act PL 90-148
- 1969 - National Environmental Policy Act PL 91-190
- 1970 - Clean Air Act Extension PL 91-604
- 1976 - Toxic Substances Control Act PL 94-469
- 1977 - Clean Air Act Amendments PL 95-95
- 1990 - Clean Air Act Amendments PL 101-549

Water Legislation



- 1948 - Water Pollution Control Act PL 80-845
- 1965 - Water Quality Act PL 89-234
- 1966 - Clean Waters Restoration Act PL 89-753
- 1969 - National Environmental Policy Act PL 91-190
- 1970 - Water Quality Improvement Act PL 91-224
- 1972 - Federal Water Pollution Control Amendments of 1972 PL 92-500
- 1974 - Safe Drinking Water Act PL 93-523
- 1976 - Toxic Substances Control Act PL 94-469
- 1977 - Clean Water Act PL 95-217
- 1987 - Water Quality Act PL 100-4
- 1996 - Safe Drinking Water Act Amendments of 1996

Land Legislation

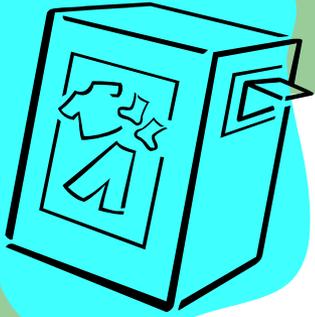


- 1947 - Federal Insecticide, Fungicide, and Rodenticide Act
- 1964 - Wilderness Act PL 88-577
- 1968 - Scenic Rivers Preservation Act PL 90-542
- 1969 - National Environmental Policy Act PL 91-190
- 1970 - Wilderness Act PL 91-504
- 1977 - Surface Mining Control and Reclamation Act PL 95-87
- 1978 - Wilderness Act PL 98-625
- 1980 - Alaska National Interest Lands Conservation Act PL 96-487
- 1994 - California Desert Protection Act PL 103-433
- 1996 - Food Quality Protection Act
- 2010 - California Desert Protection Act

HAZARDOUS WASTE Legislation



- 1965 - Solid Waste Disposal Act PL 89-272
- 1969 - National Environmental Policy Act PL 91-190
- 1970 - Resource Recovery Act PL 91-512
- 1976 - Resource Conservation and Recovery Act PL 94-580
- 1980 - Comprehensive Environmental Response, Compensation, and Liability Act ("Superfund") PL 96-510
- 1982 - Nuclear Waste Repository Act PL 97-425
- 1984 - Hazardous and Solid Wastes Amendments Act PL 98-616
- 1986 - Superfund Amendments and Reauthorization Act PL 99-499
- 2002 - Small Business Liability Relief and Brownfields Revitalization Act ("Brownfields Law") PL 107-118

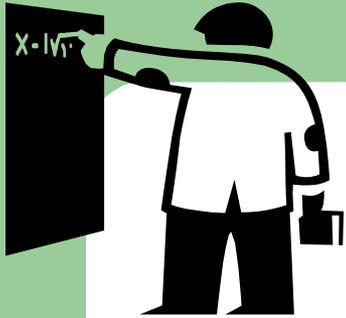


EPA Programs



- **Pesticide:** Federal Insecticide, Fungicide, and Rodenticide Act of 1947 (FIFRA)
- **Safer Detergents Stewardship Initiative:** How to make surfactants more degradable in our water supply
- **Air quality:** The Clean Air Act
- **Oil pollution:** SPCC - (Spill Prevention Containment and Counter Measures) Secondary Containment mandated at oil storage facilities. Oil release containment at oil development sites
- **Drinking water :** EPA oversees states, local governments and water suppliers to enforce the standards, under the Safe Drinking Water Act. The program includes regulation of injection wells in order to protect underground sources of drinking water.





Why are we learning about this?

The leadership of the university has expressed an interest in maintaining an environmentally safe and well maintained campus.

As employees it is our duty to follow proper guidelines for the protection of our resources and to try to resolve any conflicts dealing with our facility resources.



I.C.U.T.

The university belongs to an organization called Independent Colleges and Universities of Texas (*ICUT*). *ICUT* polices' private universities for compliance with EPA regulations.

Since member universities are conducting these inspection "audits" any discrepancies that are discovered can be resolved without needing to involve actual EPA inspectors. If discrepancies are not resolved in a timely manner then *ICUT* may notify the EPA for a more concise audit; fines may be levied if it is found that compliance issues are not being met.



Term Definitions

- **NFPA Diamond:** National Fire Prevention Association Hazard Symbol
- **MSDS:** Material Safety Data Sheet
- **Waste:** Items that have served their useful purpose and are no longer wanted or needed. Their toxicity levels are low enough so as not to present a danger to organic life; when their toxicity levels become more elevated, then greater precaution must be taken and restrictions followed so as not to contaminate their surroundings. Usually waste is broken in subcategories such as: Non-Regulated waste, Regulated waste, Universal waste, Hazardous waste, Toxic waste etc.

The F-list

The K-list

The P-list

The U-list

*These are sub-lists of
different waste types*

EPA Acronyms



- **CAA:** CLEAN AIR ACT (1955, 1963, 1965, 1970, 1990)
- **NESHAP:** NATIONAL EMISSION STANDARD FOR HAZARDOUS AIR POLLUTANTS
- **NAAQS:** NATIONAL AMBIENT AIR QUALITY STANDARDS
- **CWA:** CLEAN WATER ACT
- **SPCC PLAN:** CONTAINMENT & COVERAGE OF ALL RUN OFF / SPILLS
- **RCRA:** RESOURCE CONSERVATION & RECOVERY ACT
- **EPCRA:** EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT
- **CERCLA:** COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT.

Disposing different types of wastes



Trash is part of daily life. When we finish using a product, we throw its container and any un-used portion into a waste basket. But what if by doing that we contaminate and endanger the environment and our co-workers?

Not all waste is the same, and some wastes are regulated as to where and how their containers, or un-used portions are disposed of



Some different types of Waste

(there are many more types)



- **Universal Waste:** 40 CFR part 273 batteries pesticides, mercury-containing equipment, and bulbs (lamps) waste that is of a moderate hazard level and can be disposed of by recycling or standard disposal methods, recycling being the preferred method.
- **Hazardous Waste:** waste that is dangerous to either humans or the environment or both. Hazardous wastes exhibit one of four characteristics: ignitability, corrosivity, reactivity, & toxicity.
- **E-waste:** waste that is electronic in nature such as: radios, computers, CRT's, office machines, etc...

Practical Applications Exercises

Situation 1

You are assigned to clean a chemistry lab and notice several un-labeled open glass containers full of an unknown liquid. The container is also sitting in a puddle of another unknown liquid. The lab needs to be cleaned, and the table tops are very grimy.

You have a spray bottle of ammonia based window cleaner, a spray bottle of an all-purpose disinfectant cleaner, paper towels, and no rubber gloves.





Practical Applications Exercises

Situation 2

You are assigned to change a valve and you need to empty the chilled water supply.

Should you,

Empty the water into a sanitary sewer

Or

Check the copper and lead content of the water before you empty it into a sanitary sewer?

Practical Applications Exercises



Situation 3

...yes I know there are incandescent bulbs pictured

You have changed several *fluorescent* light bulbs, what do you do with the used bulbs?



or



MSDS

and on a final note...



The MSDS should be checked for the chemical dangers and disposal procedures.

If an MSDS does not cover the type of waste that you have for disposal, ask your supervisor for help.

Never use chemical products that are in an unmarked container; seek guidance before disposing of them in regular trash cans.

Thank you for your attention

End of program

